

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trad mark Offic

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
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TM31/0418 PILLSBURY MADISON & SUTRO LLP INTELLECTUAL PROPERTY GROUP NINTH FLOOR 1100 NEW YORK AVENUE NW WASHINGTON DC 20005-3918

EXAMINER ROMERO, A PAPER NUMBER **ART UNIT** 2152

DATE MAILED: 04/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Supplemental Office Action Summary

Application No.

Applicant(s) 09/612,598

Examiner

Art Unit

Farber et al



Almari Romero 2152 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 1) Responsive to communication(s) filed on Mar 13, 2001 2a) This action is **FINAL**. 2b) This action is non-final. 3) \square Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) X Claim(s) 41-69 is/are pending in the application. 4a) Of the above, claim(s) ______ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) X Claim(s) 41-69 7) Claim(s) ______ is/are objected to. 8) Claims ______ are subject to restriction and/or election requirement. **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on ______ is/are objected to by the Examiner. 11) ☐ The proposed drawing correction filed on ______ is: a) ☐ approved b) ☐ disapproved. 12) \square The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) ☐ All b) ☐ Some* c) ☐ None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. ___ 3.
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) Notice of References Cited (PTO-892) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152) 17) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 14 20) Other:

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SUPPLEMENTAL ACTION

- 1. This Office Action is in response to communication received on 3/13/01, where initial Office Action mailed on 3/16/01 did not examine claims enclosed on Pre-Amendment D mailed on 3/13/01 consisting of adding claims 62-69. Agreement between Applicant and Examiner has been reach via telephone interview on 02/01/00 wherein a Supplemental Office Action will be mailed. Applicant's shortened statutory period for response is hereby set according to the mailing data of this communication.
- 2. Amendments filed on 7/7/00, claims 1-24 are canceled and claims 25-40 were newly added for examination. Amendment filed on 9/18/00, claims 41-61 are newly added for examination.

 Amendment filed on 12/14/00, claims 25-40 are canceled.
- 3. Claims 41-69 are pending for examination.

Drawings

- 4. The drawings are objected to because of PTO-948 form. Correction is required.
- 5. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
- 6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the set of content servers as the "repeaters 104a, 104b, 104c", the content provider server as the "origin server 102", buddy

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server as the "Master Repeater 104m", must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 U.S.C. § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 41-48, 50, 54, 58, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (U.S. Patent No. 6,006,264) in view of Chow et al. (U.S. Patent No. 6,029,175) in further view of Brendel et al. (U.S. Patent No. 5,774,660).
- 9. Regarding claim 41, Cobly et al. (Cobly) discloses the invention substantially as claimed. Colby discloses; a distributed hosting framework operative in a computer network in which users of client machines connect to a content provider server (on col. 3, lines 10-28: teaches client, administrative authorities as Internet Service Providers (content provider server); a set of content servers, distinct from the content provider server (on col. 3, lines 10-28: teaches a plurality of servers); wherein response to requests for the web page (on col. 3, lines 10-12: teaches service a

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client request for content in a IP network). However, Colby does not explicitly disclose "modifying at least one embedded object URL of a web page to include a hostname prepended to a domain name and path; hosting at least some of the embedded objects of web pages that are normally hosted by the content provider server; and generated by the client machines the web page including the modified embedded object URL is served from the content provider server and the embedded object identified by the modified embedded object URL is served from a given one of the content servers". Chow et al. (Chow) on col.5, lines 1-21: teaches embedded objects, modifying URL's (modifying at least one embedded object URL of a web page); on col. 10, lines 3-18: teaches modifying hyperlink by prepending hostname to a domain name and path; on col. 9, lines 32-35 and col. 22, line 58 - col. 23, line 44: teaches the client with browser can generate web page including the modified URL served by the Revision Manager (content provider server) or by the remote HTTP servers (content servers). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the embedded objects, modifying of URL's by prepending hostname to a domain name and path, as taught by Chow, to service client requests by the Internet Service Provider (content provider server) or a plurality of servers, as taught by Cobly, in a network environment. The motivation to do so would have been to provide the modifying of URL's by prepending hostname to a domain name and path to transmit client's request to the Service Provider or a plurality of servers in order to improve quality of service.

However, Colby-Chow do not explicitly disclose "at least one first level name server that provides a first level domain name service (DNS) resolution; and at least one second level name

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server that provides a second level domain name service (DNS) resolution". Brendel on col. 1, lines 36-50 and col. 2, lines 18-28: teaches Domain is a group of computers and domain name service (DNS) server which is a special Internet server with look-up table with domain names on the entire Internet or in a local region of the Internet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide domain name service (DNS) server to identify domains in the network, as taught by Brendel, and modify URL to be service client requests by the Internet Service Provider (content provider server) or a plurality of servers, as taught by Cobly-Chow, in a distributed network environment. The motivation to do so would have been to provide the domain name service (DNS) server to identify a domain of a plurality of servers and modify transmit to client's request to a domain of a plurality of servers in order to avoid bottleneck in the network and increase fault-tolerance.

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- 10. Regarding claim 42, Brendel on col. 2, lines 59-67 and col. 5, line 47- col. 6, line 5: teaches replicated servers with content mirrored on all servers and to select on of the replicated servers upon a failure condition.
- 11. Regarding claims 43 and 44, Brendel on col. 2, lines 18-28 and col. 5, line 47- col. 6, line 5: teaches DNS server and load balancing mechanism.
- 12. Regarding claim 45, Colby on col. 8, lines 12-15: teaches directing a request for the client and Chow on col. 5, liens 1-21: teaches embedded objects.
- 13. Regarding claim 46, Chow on col. 16, lines 17-26: teaches the Revision Manager intercepts the traffic between a client browser and remote servers.

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- 14. Regarding claim 47, Chow on col. 32, line 59- col. 33, lines 61: teaches determining whether a number of requests exceeds a given threshold.
- 15. Regarding claim 48, Chow on col. 5, lines 1-21 and col. 16, lines 17-26: teaches serving a document having embedded objects identified by URL and on col. 10, lines 3-18: teaches modifying (rewriting) URL including a new hostname prepended to an original hostname; Colby on col. 3, lines 10-28 and col. 8, lines 12-15: teaches redirecting request to a remote server other than an Internet Service Provider.
- 16. Regarding claim 50, Brendel on col. 2, lines 59-67: teaches replicated servers with content mirrored on all servers.
- 17. Regarding claim 54, Brendel on col. 2, lines 39-67: teaches identifying one or more servers to retrieve requested document.
- 18. Regarding claims 58 and 68, Brendel on col. 1, lines 36-63: teaches HTML web pages.
- 19. Claims 49, 51-53, 55-57, 59-67, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby-Chow-Brendel as applied to claims 41-48, 50, 54, 58, and 68 above, and further in view of Earl et al. (U.S. Patent No. 6,041,324).
- 20. Regarding claims 49 and 66, Colby-Chow-Brendel discloses the invention substantially as claimed as described *supra*. However, Colby-Chow-Brendel do not explicitly disclose " responsive to a browser query to resolve the hostname". Earl et al. (Earl) on col. 7, line 55- col. 8, line 33: teaches resolution operation to determine if URL has the correct location of the

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resource. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a resolution operation for the location of the resource (hostname), as taught by Earl, to identify one of the plurality of servers that can service client request and client with browser to retrieve desired document, as taught by Cobly-Chow-Brendel, in a IP network. The motivation to do so would have been to provide the resolution operation to resolve the location of the resource and identify a server to server client's request and client browser to retrieve the requested in order to avoid errors in the modification of the URL.

- 21. Regarding claims 51, 53, and 57 are substantially the same as claims 41, 48, and 49 and are thus rejected for similar reasons to those in rejecting claims 41, 48, and 49.
- 22. Regarding claims 52, 56, and 63, Brendel on col. 5, line 47- col. 6, line 5: teaches determining the current traffic conditions in the network and identifying best server to serve client's request.
- 23. Regarding claim 55, Earl on col. 7, line 55- col. 8, line 33: teaches resolving a URL to identify location of a resource.
- 24. Regarding claims 59-61, are substantially the same as claims 41-50 and are thus rejected for similar reasons to those in rejecting claims 41-50.
- 25. Regarding claims 62 and 64, are substantially the same as claim 51 and are thus rejected for similar reasons to those in rejecting claim 51.
- 26. Regarding claims 65 and 69, are substantially the same as claim 53 and are thus rejected for similar reasons to those in rejecting claim 53.

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27. Regarding claim 67, is substantially the same as claim 57 and is thus rejected for similar reasons to those in rejecting claim 57.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner 28. should be directed to Almari Romero whose telephone number is (703) 305-0749. The examiner can normally be reached on Mondays-Fridays from 7:30 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for this Group is (703) 308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

> MARK H. RINEHART SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100

Almari Romero **Patent Examiner** Art Unit 2152